

DOCKET NO.: PUAS-0067

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Stephen R. Forrest, et al.

Application No.: 10/642,316

Filing Date: August 15, 2003

For: TWIN WAVEGUIDE BASED DESIGN FOR PHOTONIC INTEGRATED CIRCUITS

Confirmation No.: Not Yet Assigned

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

DATE OF DEPOSIT: *October 15, 2003*

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

Elizabeth A. McLoud

TYPED NAME: Elizabeth A. McLoud

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).



In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date

of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached;
or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).

- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.

- ☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☐ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

EXCEPT THAT:

- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
- ☒ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
- ☒ Copies of references **9-24** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. **09/337,785 now U.S. Patent No. 6,381,380**, filed **June 22, 1999**; copies of references **1-7 and 25-34** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. **09/982,001**, filed **October 18, 2001**; copies of references **8 and 35-39** listed on the attached Form PTO-1449 were previously cited by or

DOCKET NO.: PUAS-0067

- 4 -

PATENT

submitted to the Patent and Trademark Office in prior
Application No **10/163,436**, filed **June 4, 2002**.

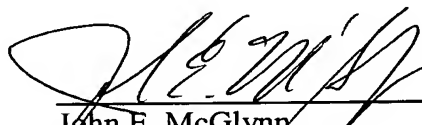
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3050. This form is submitted in duplicate.

☐ The relevance of those listed references which are not in the English language is as follows:

☒ There are no listed references which are not in the English language.

Date:

10/15/03

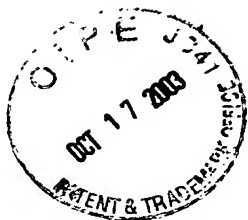

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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. PUAS-0067	Application No. 10/642,316
		Applicant Stephen R. Forrest, et al.	
		Filing Date August 15, 2003	Group Not Yet Assigned
		Confirmation No. Not Yet Assigned	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	1	Dagenais, M., et al., "Alignment tolerant lasers and silicon waferboard integration," <i>Passive Alignment Techniques for Optoelectronic Transmitter Arrays</i> , http://www.ee.umd.edu/photronics/papers/spie/SPIE97.htm , 1997, 6 pages	
	2	Dagenais, M., et al., "complex needs drive optoelectronic integration," <i>Optoelectronics World</i> , July 1998, 157-160	
	3	Saini, S.S., et al., "Compact mode expanded lasers using resonant coupling between a 1.55- μ m InGaAsP tapered active region and an underlying coupling waveguide," <i>IEEE Photonics Technology Letters</i> , September 1998, 10(9), 3 pages	
	4	Studenkov, P.V., "Efficient coupling in integrated twin-waveguide lasers using waveguide tapers," <i>IEEE Photonics Technology Letters</i> , 1999, 11(9), 1096-1098	
	5	Studenkov, P.V., "Asymmetric twin-waveguide 1.55- μ m wavelength laser with a distributed bragg reflector," <i>IEEE Photonics Technology Letters</i> , 2000, 12(5), 468-470	
	6	Studenkov, P.V., "Monolithic integration of a quantum-well laser and an optical amplifier using an asymmetric twin-waveguide structure," <i>IEEE Photonics Technology Letters</i> , 1998, 10(8), 1088-1090	
	7	Vusirikala, V., et al., "1.55- μ m InGaAsP-InP laser arrays with integrated-mode expanders fabricated using a single epitaxial growth," <i>IEEE J. Selected Topics in Quantum Electronics</i> , December 1997, 3(6), 1332-1343	
	8	Fredkin, E., et al., "Conservative logic," <i>Int. J. Theor. Phys.</i> , 1982, 21(3/4), 219-253	
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	10	5,140,149	08/1992	Sakata, et al.	250	211 J
	11	5,208,878	5/1993	Thulke	385	14
	12	5,325,379	06/1994	Amann	372	20
	13	5,355,386	10/1994	Rothman, et al.	372	50
	14	5,499,259	03/1996	Makita	372	45
	15	5,511,084	04/1996	Amann	372	20
	16	5,568,311	10/1996	Matsumoto	359	344
	17	5,623,363	04/1997	Liou	359	344
	18	5,663,824	09/1997	Koch, et al.	359	184
	19	5,721,750	02/1998	Kwon, et al.	372	44
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Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	24	WO 99/67665	12/1999	PCT		

EXAMINER	DATE CONSIDERED
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					YES	NO

EXAMINER**DATE CONSIDERED**